For the **PhotoMed/Canon SX740** Digital Camera System

Congratulations on your purchase of the Canon SX740 Digital Camera. Your camera has been completely assembled, tested and is ready to start taking clinical photos. The instructions listed below show you the camera settings that work best for macro photography. If you use the camera for recreational photography, use these instructions to return the camera to the proper clinical settings. Consult the Canon instruction book for details on all other camera functions.

### Identifying the parts of your Canon SX740 Clinical Camera System
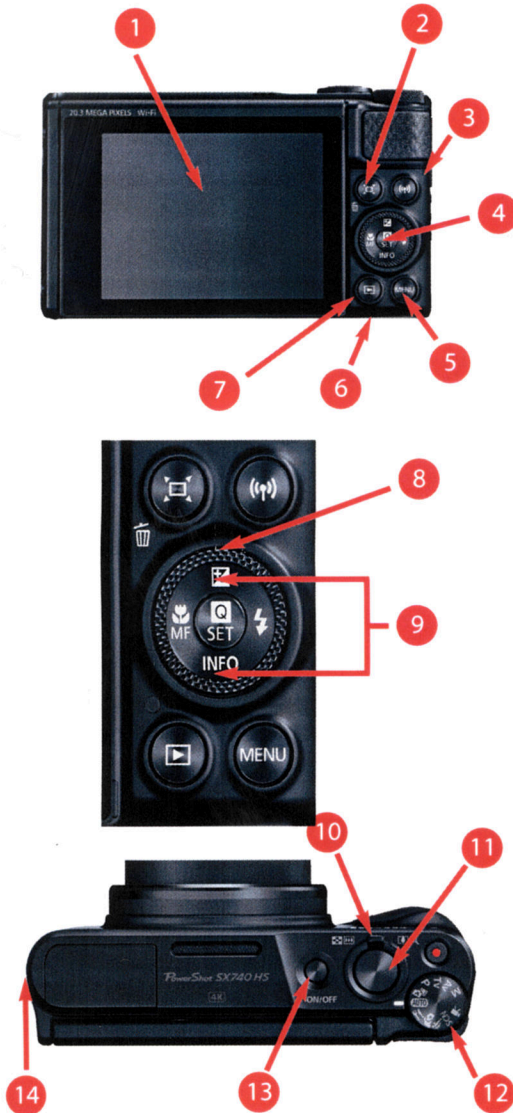
1. **LCD Screen:** functions as the camera viewfinder when taking photos and displays captured photos when in PLAY mode

2. **Image Erase Button:** in PLAY mode, used to erase an image.

3. **Port Cover:** covers the USB and video ports *(on side of camera)*.

4. **Q/Set Button:** used to access the QUICK CONTROL MENU and choose options - use the Control Dial(#8) or Omni Selector (#9) to navigate the menus.

5. **Menu Button:** press to access the camera menus.

6. **Battery and Memory Card Slot:** at bottom of camera

7. **Playback Button:** used to change to PLAY mode.

8. **Control Dial:** used to set the f-stop. Also allows navigation through the camera menu options and through captured images in PLAY mode.

9. **Omni Selector:** located inside the Control Dial. The Omni Selector allows you to access four camera functions *(flash mode, exposure compensation, macro mode and info)* as well as navigate the camera menus. The Omni Selector has four button positions - up, down, left & right.

10. **Zoom Lever:** used to change the image magnification in the SHOOTING mode. Pull the Zoom Lever to the right to photograph a smaller field. Push to the left to shoot a larger field. In PLAY mode, used to enlarge the image on the LCD Screen.

11. **Shutter Button:** used to lock focus and take a photo.

12. **Mode Dial:** used to select the camera shooting mode.
    For closeup photos, the MODE DIAL should be set to Av
    For portraits, use the P mode.

13. **Power Button:** used to turn the camera on and off.

14. **Flash Switch:** *(on side of camera)* used to pop up and activate the built-in flash. The flash must be in the up position whenever you take clinical photos.

Memory Card
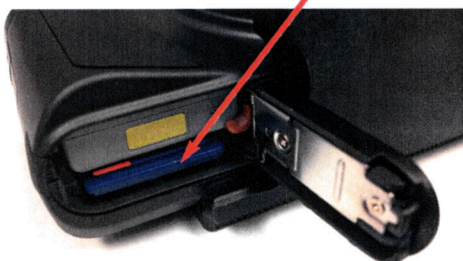
The memory card has been installed in the camera and formatted. As shown to the left, the memory card slot is located inside the battery compartment. To remove the memory card from the camera, open the battery door (located on the bottom of the camera) and push in on the memory card. This will release it part way. Grasp the card and remove.

The Canon SX740 uses a Canon lithium-ion rechargeable battery (NB-13L). A Canon compact, portable battery charger is included and takes approximately 90 minutes to fully charge the battery.
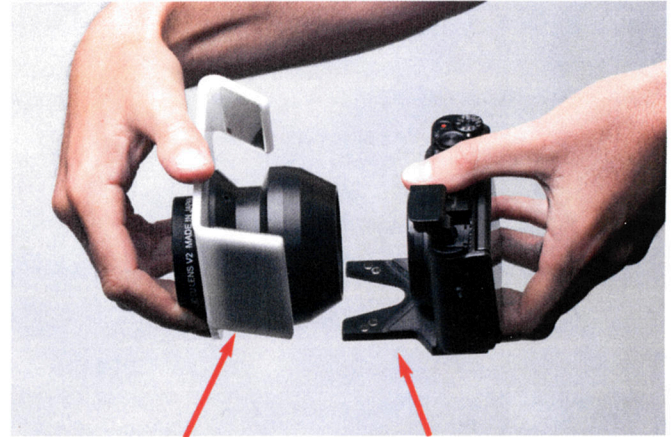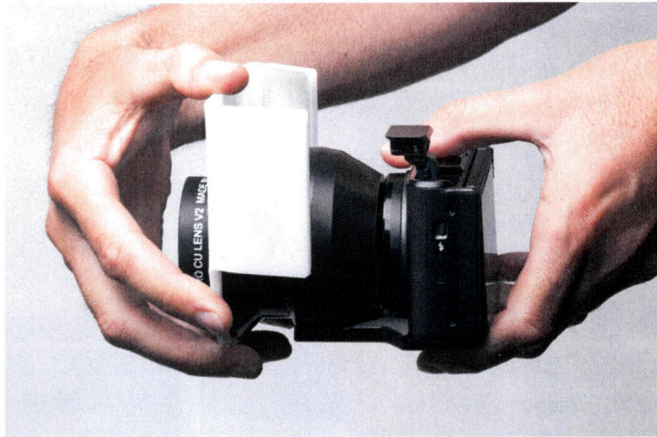
Diffuser/Tube   **Mounting Fork**
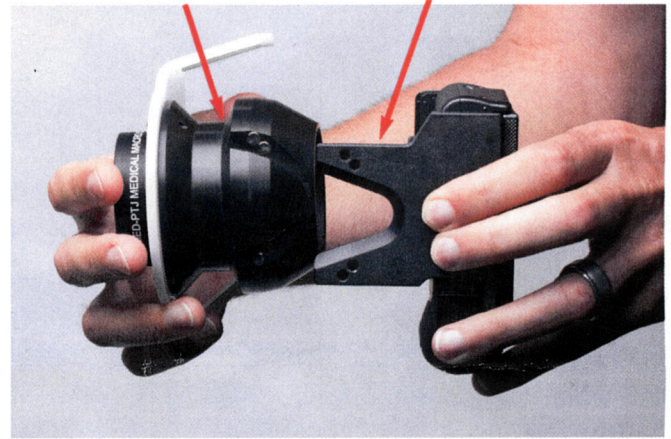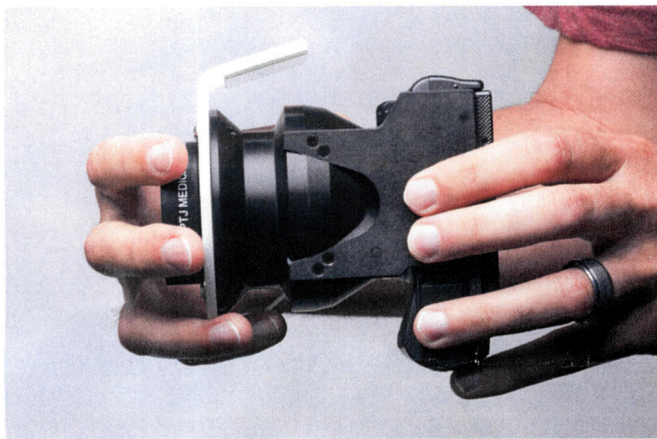
Removing / Reattaching the Closeup Attachment Kit to the SX740 Camera

The PhotoMed Closeup Attachment Kit is attached to the camera by magnets built into the Diffuser/Tube and the Mounting Fork. The Diffuser/Tube is required for closeup photos but must be removed when taking portrait views.

To remove the Diffuser/Tube, hold the camera body in one hand and grasp the Diffuser/Tube with the other hand *(as shown above)*. Pull the Diffuser/Tube away from the camera. The Mounting Fork will remain attached to the camera.

When re-attaching the Diffuser/Tube, it is recommended to turn the camera off so that the lens will retract into the camera.

To re-attach the Diffuser/Tube, line up the two pieces of the Fork with the notches in the bottom of the Tube. Slide the Tube all the way back towards the camera to allow the magnets to lock the Diffuser/Tube in place.

Shutter Button

Zoom Lever

Power Button

Mode Dial

Pop Up Flash

**Flash Button**

Taking a closeup photograph

NOTE: The Diffuser/Tube must be attached to the camera for closeup photography. See page 2 for more information.

Step 1: Turn the camera on by pressing the Power Button. In a few moments, the LCD display will activate and become your viewfinder. The LCD display shows exactly what the lens sees, allowing you to compose your photo.

Slide the Flash Button to pop up the built-in flash *(as shown at left)*

Step 2: For closeup views, turn the MODE DIAL to Av.
When you first turn on the camera, you will see a circular image in the center of the LCD display on the back of the camera. Move the Zoom Lever to the right until the image fills the entire LCD display *(as shown below)*.
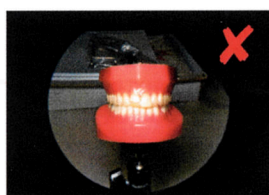
Step 3: While looking at the LCD display, move the camera towards or away from your subject until the image on the screen is in sharp focus. **Press and hold the Shutter Button halfway down**.

In a moment, the white square in the center of the LCD display will turn either green or yellow. If the square turns green, you are in focus. Press the Shutter Button fully to take the photo. The captured image will now show on the screen while the camera records the image on the memory card.

If the square turns yellow, the camera was unable to autofocus - lift your finger from the Shutter Button and re-compose the image.

Use the Zoom Lever to control the size of your image. As you zoom in, you increase the image magnification and you can take photos of smaller fields. The Canon SX740 has a large zoom range and the extreme telephoto will not be very useful for dental photography.

Taking a portrait photograph

Before you take a portrait photo, the Diffuser/Tube must be removed from the camera. Please follow the instructions shown on page 2 regarding removing the Diffuser/Tube.

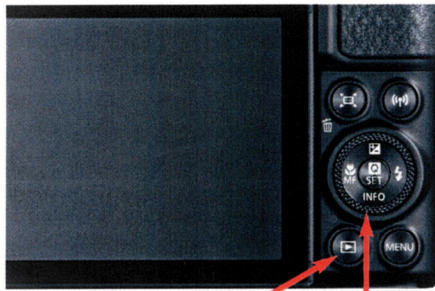**For portrait views, turn the MODE DIAL to the P Mode.**
Check to be sure that the flash is popped up *(if not, use the FLASH BUTTON to pop it up)*.
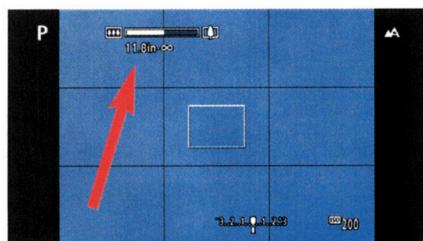
Pull the Zoom Lever to the right until you see the zoom position on the LCD display at "**11.8 - ∞**" *(as shown at left)*. This properly positions the camera lens for portrait views.

View your subject in the LCD Display and move towards and away from them to size the head in the screen. Press the shutter button to take the photo. You can also set a mark on the floor where the photographer should stand each time to get consistent portrait image sizing.

## Reviewing your photos on the camera

Press the Playback Button. The last image you took will show on the LCD display. To scroll through your images, turn the Control Dial to move forward or backward through the images. Press the Q/SET Button to select an image to view.

While in Playback mode, the Zoom Lever can be used to zoom in on an image to review it in more detail. You may also connect the camera to a television or video monitor via an optional cable and view your images full screen.

There are three viewing options (shown below):
(1) image only,
(2) image with basic details,
(3) image with shooting details and brightness histogram

To change the viewing option, press the Omni Selector down (marked INFO) repeatedly to cycle through the options while you are in the PLAY mode

Playback Button

Press down repeatedly to cycle through view options
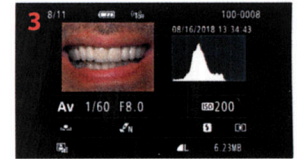
Canon SX740 Clinical Settings

The following guide lists the proper settings for the Canon SX740 as a clinical camera. **If you purchased a complete camera system, these settings are already set.** If you purchased the Closeup Attachment Kit for your camera, you will need to use this guide to set your camera. The photographs at left identify the buttons needed to choose the proper camera settings.

After attaching the PhotoMed Close-Up Attachment Mounting Fork to the bottom of the camera, turn the camera Mode Dial to the **Av** setting. To turn on your camera, press and hold the Power Button for a moment and the LCD display will illuminate. At the bottom of the screen, it may show f4.0.

For dental photos, the f-stop needs to be set to f8. To change the f-stop, turn the Control Dial to the right until the f-stop setting on the bottom of the LCD screen shows f8.0. You only need to do this once. The camera will remember the setting.

Next, set the flash mode. Press the Flash Button (on the side of the camera) to pop up the built-in flash. Press the Flash Mode Button repeatedly until the LCD display on the back of the camera shows ⚡ (flash ON). This forces the camera to use the flash for each and every photo.

Flash Mode Button

Control Dial

Function/Set Button

Menu Button

Power Button

Mode Dial
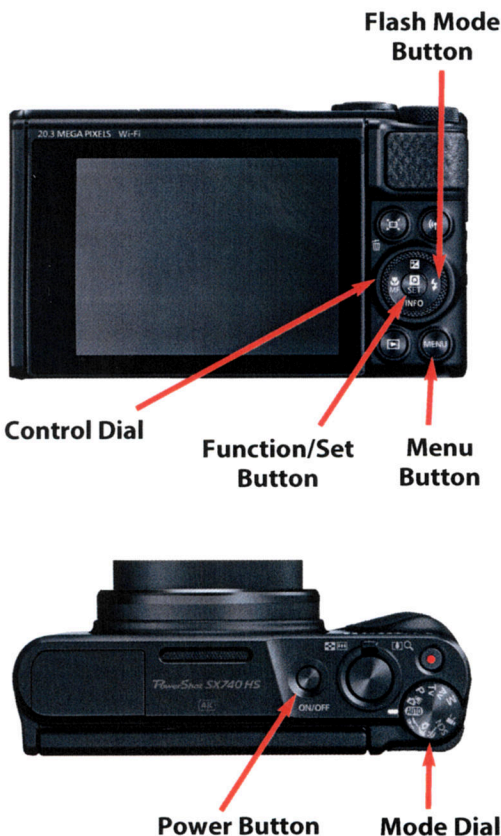
Canon SX740 Settings (cont.)

With the camera turned on, press the Menu Button. Use the Omni Selector to navigate the menus and choose the proper settings. The main menu screen gives you four menu setting choices: Shooting, Playback, Function and Disp. Level Settings. The Disp. Level Settings option allows you choose how the menu is displayed on the LCD screen.
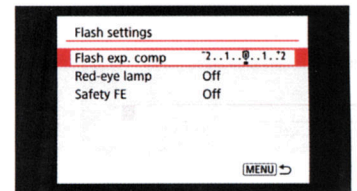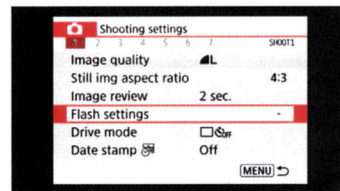
Shown below are the recommended settings for clinical use. A few of the settings can not be changed. In the case of language and NTSC/PAL, set your appropriate choice.
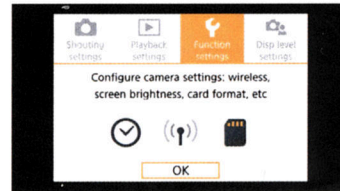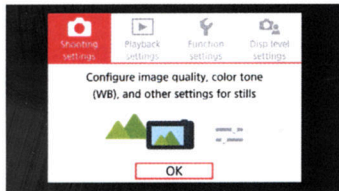
Canon SX740 - Shooting Settings menu
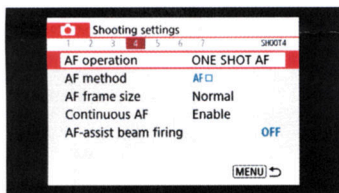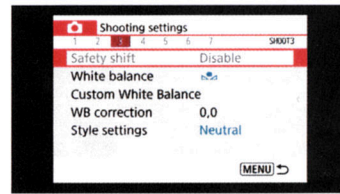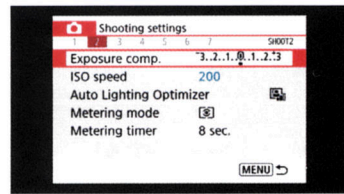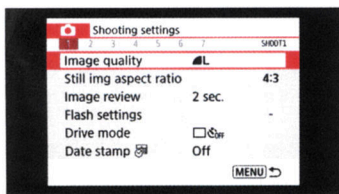

## Canon SX740 - Shooting menu:
## Flash Settings sub-menu

Canon SX740 - Function Settings menu
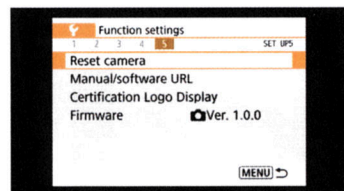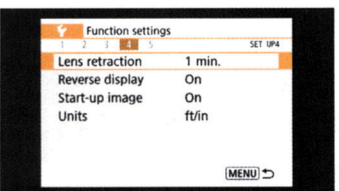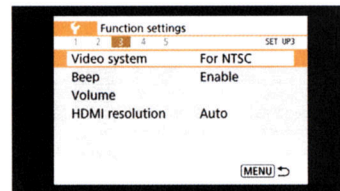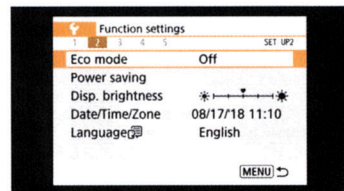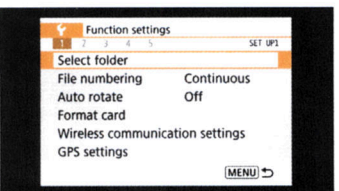
Canon SX740 Settings (cont.)

Press the Q/SET Button on the back of the camera. Use the Omni Selector to choose the settings shown below. UP/DOWN will change the menu selection and LEFT/RIGHT will change the setting within the menu. When you finish, press the Q/SET Button again to close the menus. Our recommended settings are shown on each screen shot and listed in **BOLD** type in the explanation.
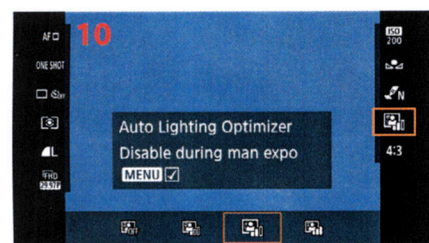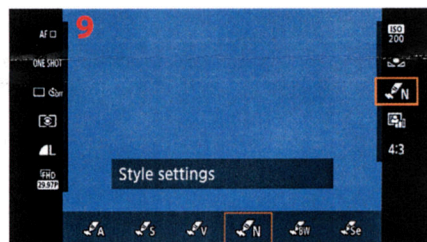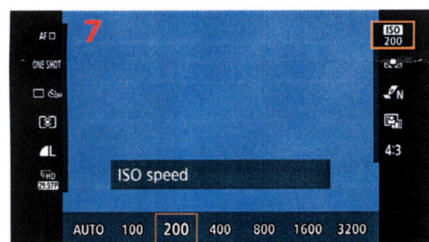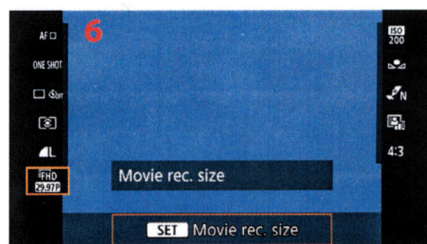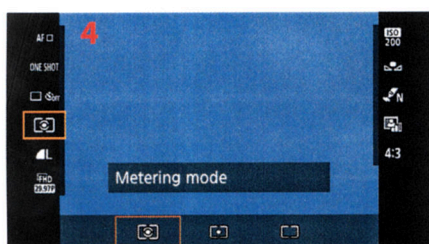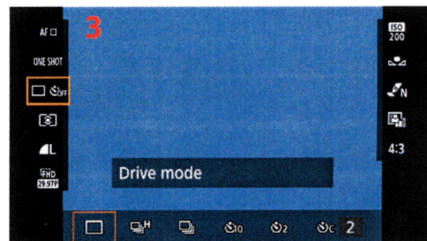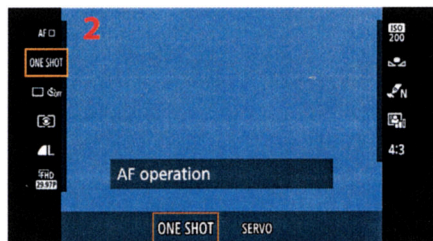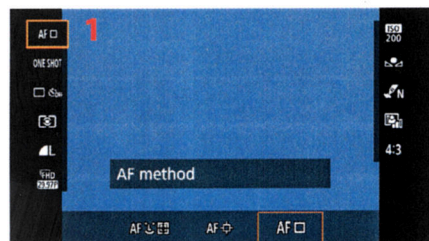

#1 sets the AF Method. **Set to AF Center (square box in center of the LCD screen).**
#2 sets the AF Operation. **Set to One Shot.**
#3 sets the Drive Mode. **Set to Single Shot (square).**
#4 sets the Metering Mode. **Set to the left icon (Evaluative)**
#5 sets the Image Quality. **Set to left icon (L with quarter circle).** If you would like to lower the resolution, choose either M or S.
#6 sets the Movie Rec. Size.
#7 sets the ISO Speed. **Set to 200.**
#8 sets the White Balance. **Set to Custom (the last icon).** See instructions on next page regarding setting the WHITE BALANCE.
#9 sets the Style Settings. **Set to L.**
#10 sets the Lighting Optimizer. **Set to Standard (the third icon).**
#11 sets the Still Image Aspect Ratio. **Set to 4:3.**

Formatting (completely erasing) a memory card

The best way to completely erase a memory card is to Format it. Turn the camera on. Press the Menu Button. Press the Omni Selector to the right to access the yellow Settings Menu. Scroll down to Format and press the Q/SET Button. The camera will ask if you really want to format. Press the Omni Selector to the right to choose OK and press Q/SET. In a few seconds, the card will be empty.

PLEASE BE AWARE: Formatting deletes everything on a memory card. Be sure that you have copied the images that you want to your computer before formatting.
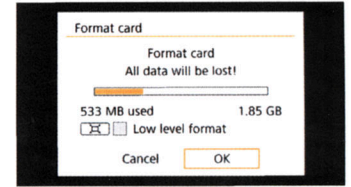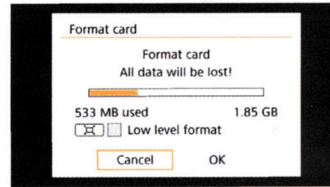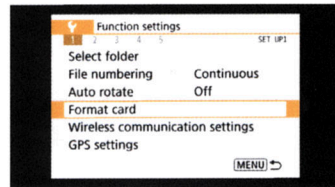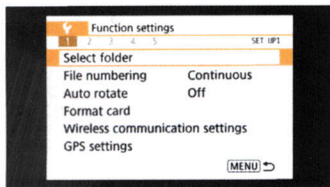

Canon SX740 - Setting the White Balance

In order to get the best color for dental photos, a custom white balance must be set. If you purchased a complete camera system, this white balance has already been set for you. If you purchased a closeup kit to fit your SX740 or if you wish to reset the white balance for your shooting environment, please follow these instructions. You will need the 18% Gray Card that was included with your package.

With the Closeup Attachment Kit attached to the camera, turn the camera on. Set the camera in the Av Mode using the Mode Dial on the top of the camera. Pop up the built-in flash. Pull the Zoom Lever to the right until the image fully fills the LCD display.
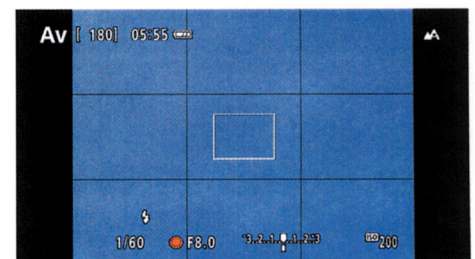
Position the camera approximately six inches from the Gray Card. With the camera pointing straight into the Gray Card, press the Shutter Button to take a photo.

Press the Menu Button and go to the third Shooting Setting screen. Choose White Balance and set it to Custom (the last icon) and press the Q/Set Button. Choose Custom White Balance and press the Q/Set Button. The last photo that was taken will appear. Press the Q/Set Button. The camera will ask you to verify that you want to use this image for the white balance. Highlight OK and press the Q/Set Button. The camera is now set for proper color.
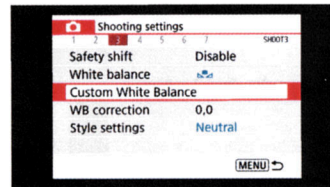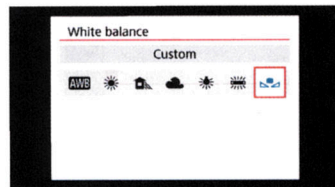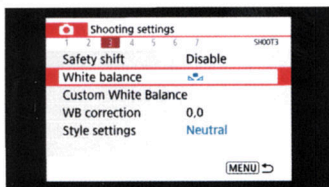
We suggest that you become familiar with the layout of the LCD display. The screenshot at right shows the icons that should be shown on the LCD screen of your camera. Before taking a photograph, glance at the LCD display and ensure that the f-stop is correct. If you get in the habit of doing this, you will catch any instances where a button gets pushed accidentally before you take the photo at an incorrect setting.

Thank you again for your purchase of the Canon SX740 Digital Clinical System. If you have any questions about the SX740, please call one of our technical experts at 818-908-5369.

PhotoMed